

National Transit Database (NTD)

Collecting Asset Data and Forecasting SGR Needs

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4th

FEDERAL TRANSIT ADMINISTRATION

State of Good Repair Roundtable

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U.S. Department of Transportation
Federal Transit Administration

NTD

National Transit Database
Federal Transit Administration



www.ntdprogram.gov

What is the NTD?

- FTA data on annual transit agency finances, costs, and operations

Why the NTD?

- Gathers certified data for formulas that determine the annual apportionment of more than \$5 billion in FTA grant funds
- Is used to assess the future investment needs of the nation's transit operators for Congress
- Is available to researchers and transit operators across the nation

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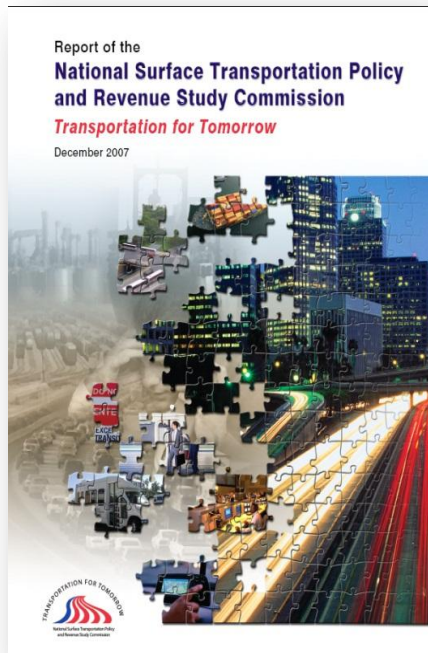
Investment
needs are reported to
Congress in the transit
sections of the biennial
“Status of the Nation’s
Highways, Bridges, and
Transit: Conditions and
Performance” report
(aka the C&P)



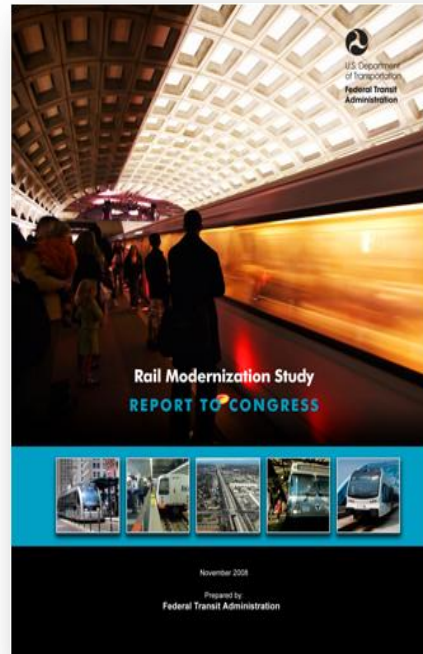
2010 C&P Released in March 2012: <http://www.fhwa.dot.gov/policy/2010cpr/>

NTD Data is also used to for Related Reports

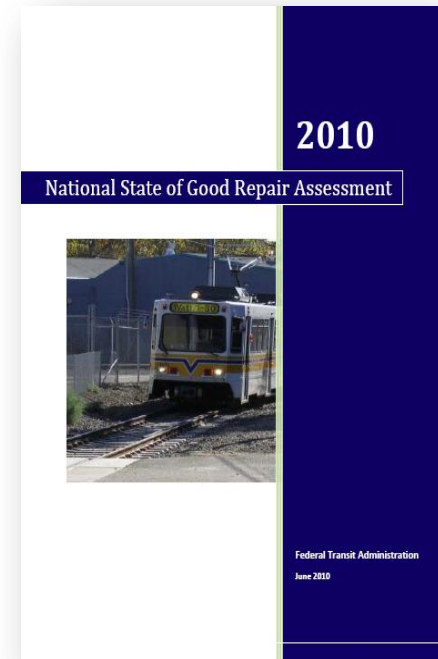
The **National Surface Transportation Commission** examined the condition and future needs of the nation's surface transportation system



The **Rail Modernization Study** assessed the investment backlog and capital reinvestment needs of the nine largest rail operators



The **National State of Good Repair Assessment** of the investment backlog and capital reinvestment needs of the transit industry



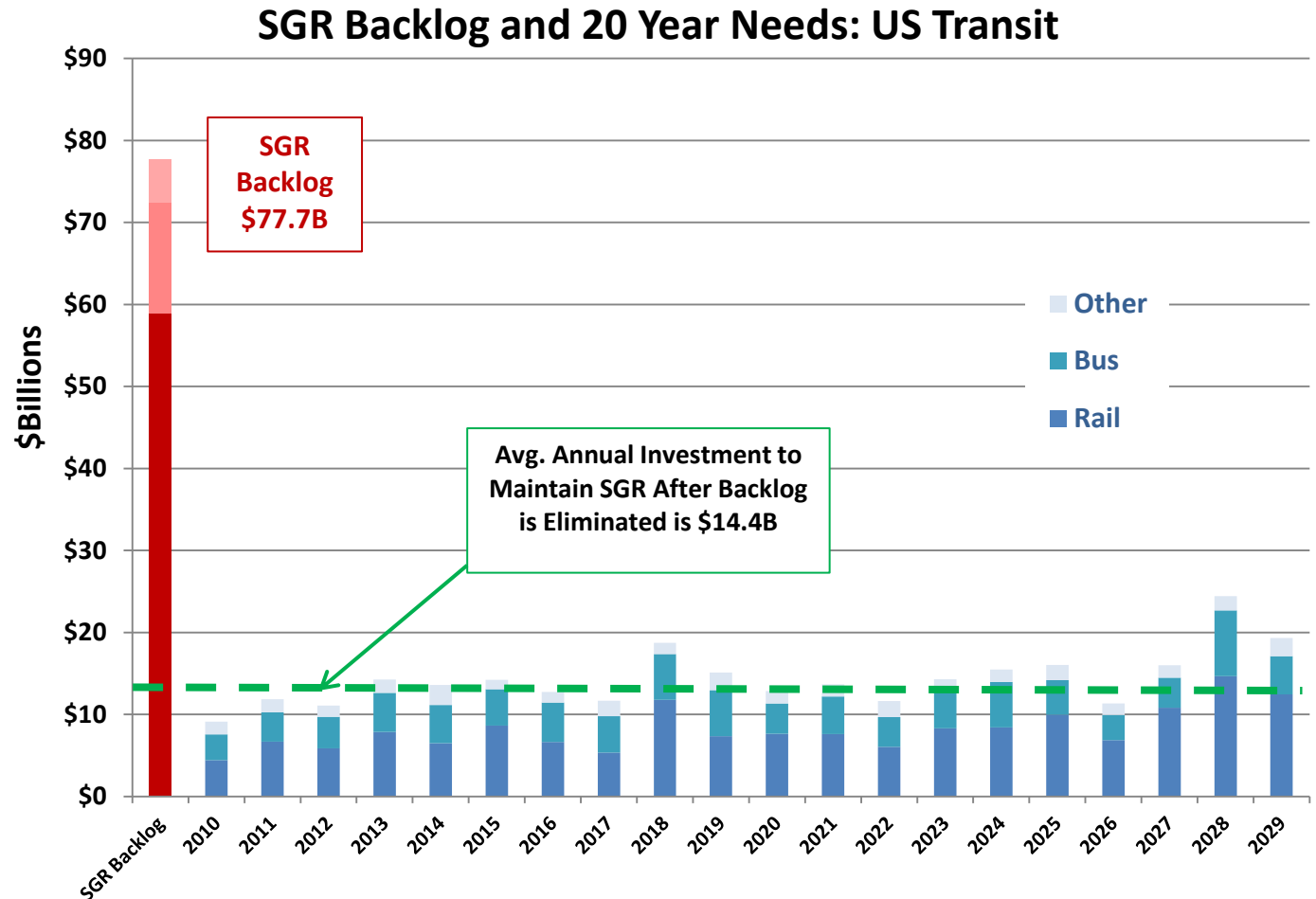
FTA Capital Investment Forecasts

- Project needs out 20 years
- Cost to replace/rehab all assets past their average useful life (SGR backlog)
- Cost of adding new assets to support various levels of growth
- Impact of continuing current investment levels on long-term cost and performance
- FTA does not estimate future operating costs (just reports past expenditures)

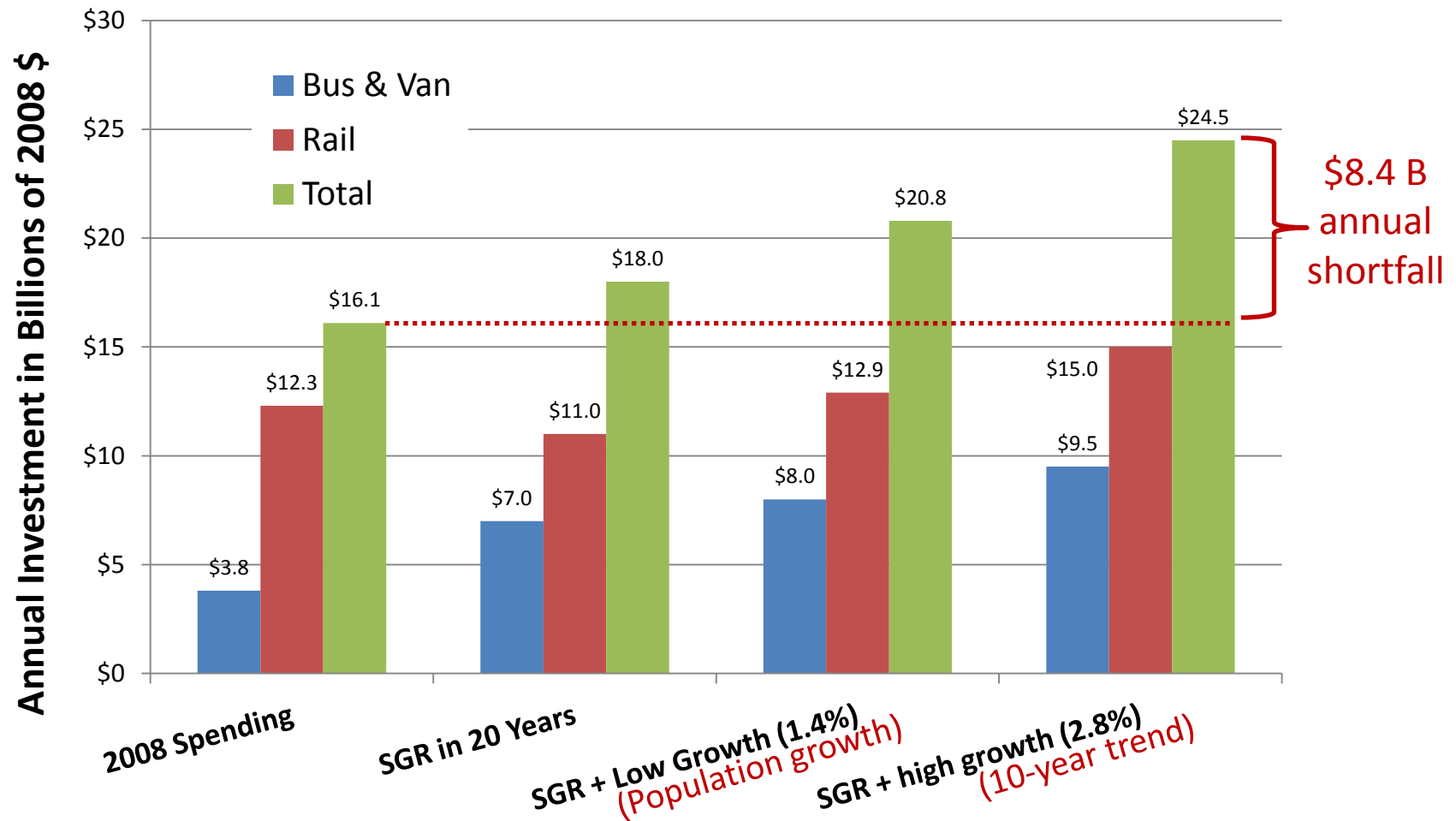


20-year Capital Reinvestment Needs Forecast (unconstrained) gives SGR Backlog

Evaluate
reinvestment
backlog and
out-year
replacement
needs

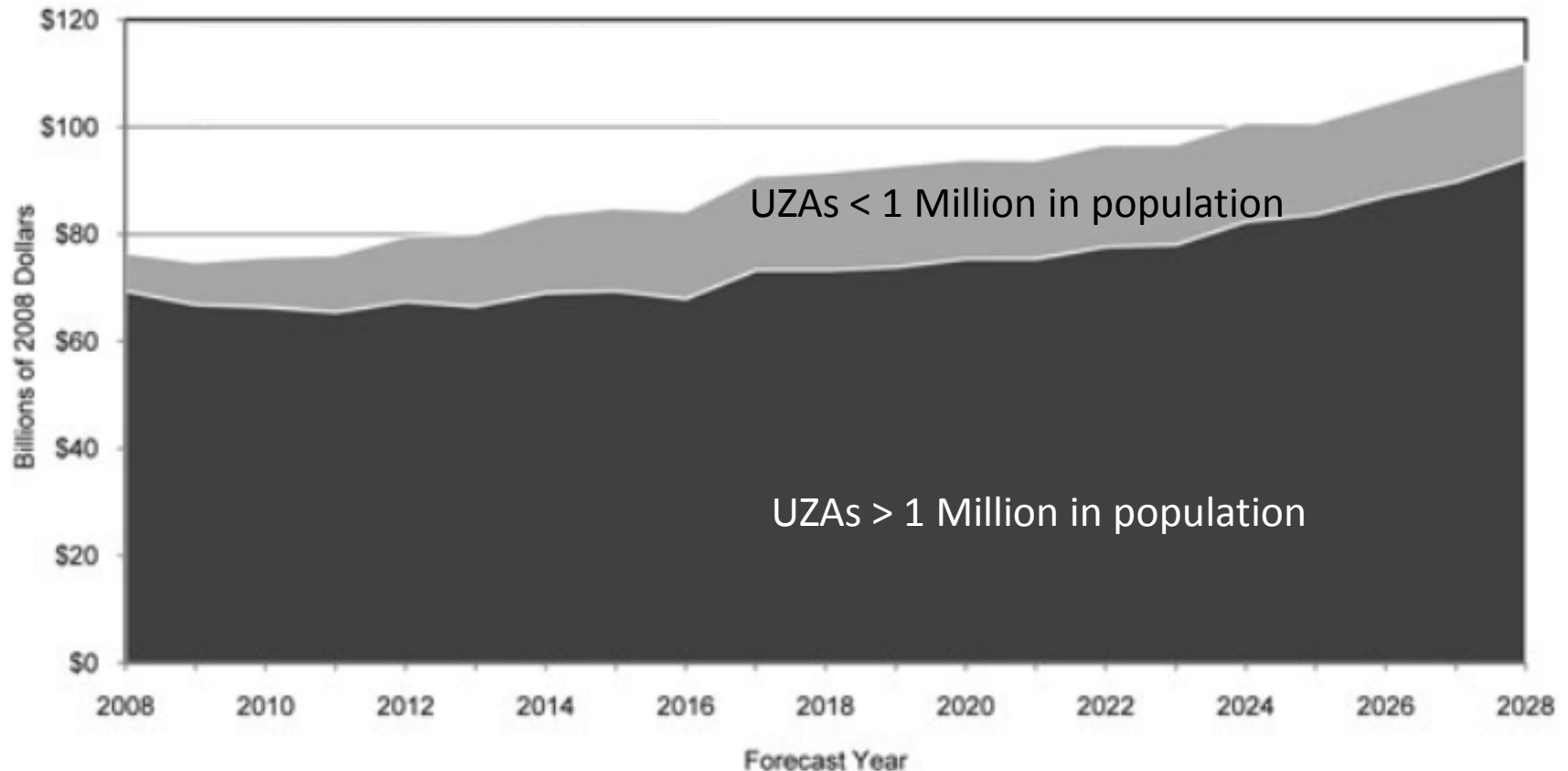


Annualized Asset Investment Needs Scenarios, 2010 C&P Report



Consequences of Underinvestment

SGR backlog growth over 20 years at current spending levels



MAP-21 Title 3(B) section 20026

- Section 5335 of title 49, United States Code, is amended by adding at the end the following:
- ‘(c) **Data Required To Be Reported**- The recipient of a grant under this chapter shall report to the Secretary, for inclusion in the National Transit Database, any information relating to--
- ‘(1) the causes of a reportable incident, as defined by the Secretary; and
- ‘(2) a transit asset inventory or condition assessment conducted by the recipient.’





Federal Transit Administration

TERM

TRANSIT ECONOMIC
REQUIREMENTS MODEL

Version 2011.1

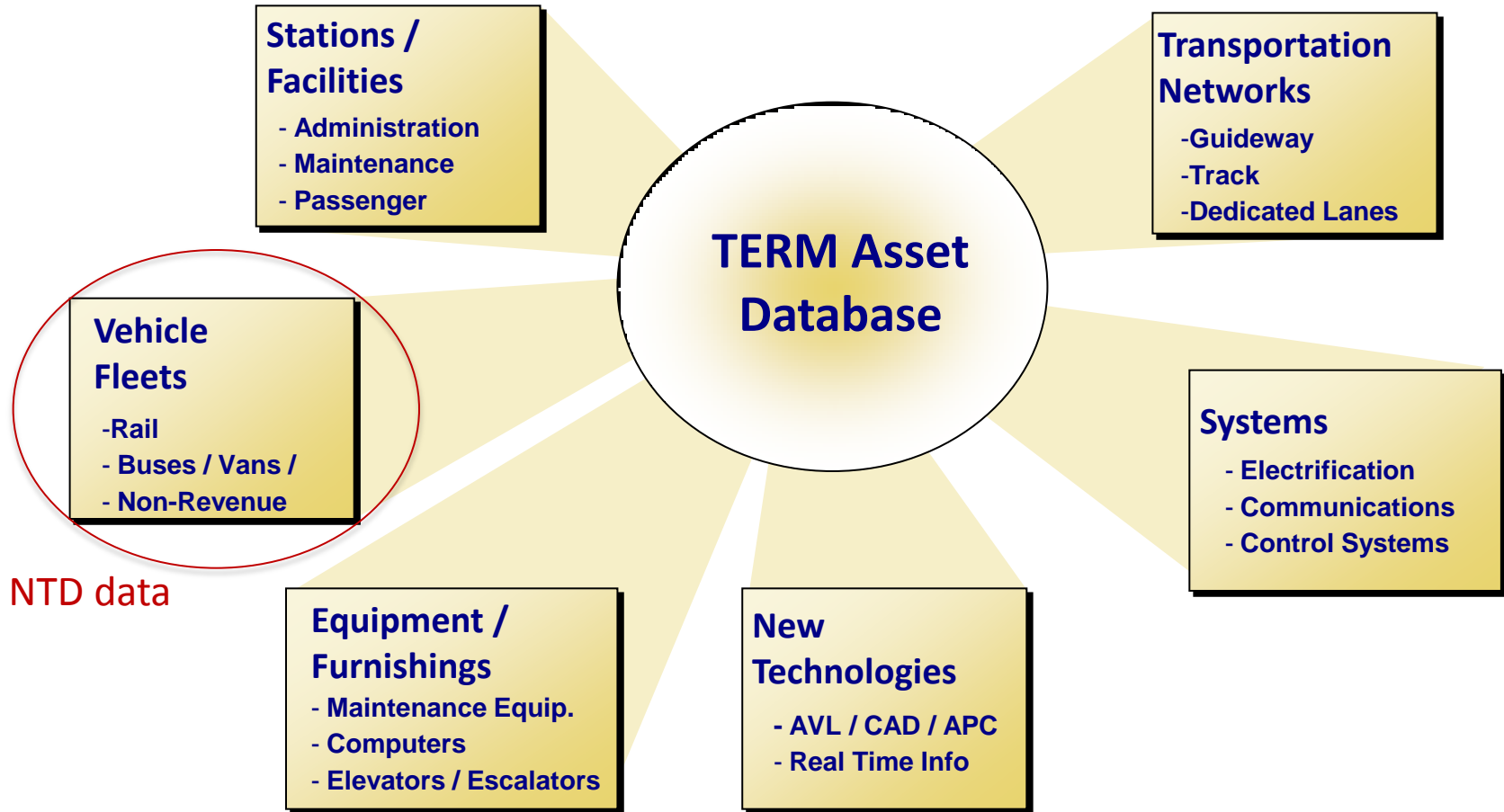
FTA's Capital Needs Analysis Tool

- Uses a database that represents *all* US transit assets
- Vehicles from NTD (25% of total US Transit investment)
- Asset inventories requested from 7 large agencies each year
- Estimates of assets at smaller agencies (25% of total)

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TERM Asset Database Includes All Asset Types



FTA Project to Develop an NTD Asset Inventory Module (AIM)

Project Objectives

Address
Congressional
directives

Enhance FTA's ability
to estimate and
update national
transit capital needs

Encourage transit
agencies to develop
an asset inventory
and use it for capital
planning

Data Problems – NTD Solutions

- Need annual update of all assets to track progress toward SGR
- Few agencies have asset inventories for capital planning
- Need to do more with less
- NTD collects accurate data annually
- Develop tool to collect high-level asset inventory
- Work with agencies to minimize reporting burden



Guiding Principles

- Integrate new data into NTD
 - Consistent with “look and feel” of NTD
 - Simplify overall data collection and eliminate redundancy
- Accommodate agency self-reporting
 - Excel-based reporting for upload and download
 - built-in validation to reduce analyst workload
- Minimize transit agency reporting burden
 - Focus on high-level assets (limited granularity)
 - Focus on objective rather than subjective data points



Reporting Burden

2002 asset inventory module pilot required 2-4 person-weeks to assemble and report data

Range of burden depends upon existing transit agency data

Less burden expected for annual updates

Burden estimates will be refined through the pre-pilots

Overview of Asset Inventory Module

- Major fixed assets (Maintenance, Administrative and Passenger Facilities)
- Linear assets (Power, Signal, Communications, Rail, Track and Bus Fixed Guideway)
- Other fixed assets (Equipment and Revenue Vehicles)



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Asset Information TERM Needs to Know

What kind of asset

Year built

Useful life

Replacement cost

Condition

Expected Data Challenges

- Data availability
- Time required for data reporting
- Absence of standards in asset definitions
 - What is a structure?
 - Shared facilities
- Complexity of linear assets
- Defining replacement cost and useful life



Pre-pilot Transit Agencies

- Heavy Rail: MARTA, WMATA, LA Metro
- “New” new light rail: UTA
- “Old” new light rail: St. Louis Metrolink
- Old light rail: Port Authority of Allegheny County
- New commuter rail: Tri-Rail (South Florida RTA)



AIM Pre-Pilot Findings

- Guideway data approach needs to be revised
 - Questions about age/condition relationship
- Some agencies can not assemble the data
 - Data does not exist in a single office
- Issues with defining replacement cost and when assets were placed in service
- Concerns over availability of sensitive data
- Staff time to complete reporting



Questions?

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